AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method for forming an electric circuit on a construction member disposed on a machine based on a set of three-dimensional data, the set of three-dimensional data used to determine a position and a profile of the construction member, a position of the electric circuit, and a shape of the electric circuit, the electric circuit used for electrical connection between electric instruments mounted on the construction member,

wherein the set of three-dimensional data is prepared when designing the machine and associated with a reference coordinate system provided in the machine, the origin of the coordinate system being located at any position of the machine, and the set of three-dimensional data includes coordinates of points for determining arrangement of the electric circuit, a distance between any two of the points adjacent to each other, and a cross-sectional area of the electric circuit extended between the two points,

the method comprising the step of converting the set of three-dimensional data of the coordinate system having the origin located at any position of the machine to a second set of three-dimensional data associated with a reference coordinate system provided in the construction member disposed on a transfer unit and having the origin in the construction member,

the method further comprising the step of intermittently jetting a molten metal against the construction member to define rows of metal grains so as to deposit the molten metal on a surface of the construction member to form the electric circuit on the construction member based on the second set of three-dimensional data,

wherein the deposited metal grains overlap one another such that the electric circuit has the cross-sectional area stored in the second set of three-dimensional data between the two points, and

wherein the molten metal is jetted from a nozzle and both the nozzle and the construction member have X, Y, Z axes perpendicular to each other, the nozzle being movable along each of the X, Y, Z axes, the nozzle moving in a circumferential direction around each of the X axis and the Y axis, and the construction member being movable along each of the X, Y, Z axes and also in a circumferential direction around each of the X, Y, Z axes.

Claims 2-6 (canceled).

Claim 7 (original): The method as described in claim 1 wherein an insulator is layered on the electric circuit.

Claim 8 (previously presented): The method as described in claim 7 wherein the method comprises the step of jetting a second molten metal against the insulator to deposit the second molten metal on the insulator.

Claims 9-10 (canceled).

Claim 11 (currently amended): A method for forming an electric circuit on an insulating intermediate member laid on a construction member disposed on a machine based on a set of three-dimensional data, the set of three-dimensional data used to determine a position and a profile of the construction member, a position of the electric circuit, and a shape of the electric circuit, the electric circuit used for electrical connection between electric instruments mounted on the construction member,

wherein the set of three-dimensional data is prepared when designing the machine and associated with a reference coordinate system provided in the machine, the origin of the coordinate system being located at any position of the machine, and the set of three-dimensional data includes coordinates of points for determining arrangement of the electric circuit, a distance between any two of the points adjacent to each other, and a cross-sectional area of the electric circuit extended between the two points,

the method comprising the step of converting the set of three-dimensional data of the coordinate system having the origin located at any position of the machine to a second set of three-dimensional data associated with a reference coordinate system provided in the construction member or on the intermediate member disposed on a transfer unit and having the origin in the member provided,

the method comprising the step of intermittently jetting a molten metal against the construction member to define rows of metal grains so as to deposit the molten metal on a surface

of the intermediate member to form the electric circuit on the surface of the intermediate member based on the second set of three-dimensional data,

wherein the deposited metal grains overlap one another such that the electric circuit has the cross-sectional area stored in the second set of three-dimensional data between the two points, and

wherein the molten metal is jetted from a nozzle and both the nozzle and the construction member have X, Y, Z axes perpendicular to each other, the nozzle being movable along each of the X, Y, Z axes, the nozzle moving in a circumferential direction around each of the X axis and the Y axis, and the construction member being movable along each of the X, Y, Z axes and also in a circumferential direction around each of the X, Y, Z axes.

Claims 12-16 (canceled).

Claim 17 (original): The method as described in claim 11 wherein an insulator is layered on the electric circuit defined on the insulating intermediate member.

Claim 18 (previously presented): The method as described in claim 17 wherein the method comprises the step of jetting a second molten metal against the insulator to deposit the second molten metal on the insulator.

Claims 19-50 (canceled).

Claim 51 (previously presented): The method as described in claim 1, wherein, in the step of intermittently jetting the molten metal against the construction member, an aerosol of the molten metal is jetted with compressed air against the construction member to define the electric circuit.

Claim 52 (previously presented): The method as described in claim 51, wherein, in the step of intermittently jetting the molten metal against the construction member, a mask is provided for the construction member to prevent scattering of the molten metal, the mask having a through hole which passes the molten metal to deposit it on the construction member.

Claim 53 (previously presented): The method as described in claim 1, wherein, in the step of intermittently jetting the molten metal against the construction member, a compressed gas having a temperature lower than a melting or softening temperature of the metal is jetted from a nozzle with an ultrasonic speed such that the grains of the metal are entrained in the ultrasonic speed flow of the gas in the nozzle.

Claim 54 (previously presented): The method as described in claim 11, wherein, in the step of intermittently jetting the molten metal against the intermediate member, an aerosol of the molten metal is jetted with compressed air against the intermediate member to define the electric circuit.

Claim 55 (previously presented): The method as described in claim 54, wherein, in the step of intermittently jetting the molten metal against the intermediate member, a mask is provided for

the intermediate member to prevent scattering of the molten metal, the mask having a through hole which passes the molten metal to deposit it on the intermediate member.

Claim 56 (previously presented): The method as described in claim 11, wherein, in the step of intermittently jetting the molten metal against the intermediate member, a compressed gas having a temperature lower than a melting or softening temperature of the metal is jetted from a nozzle with an ultrasonic speed such that the grains of the metal are entrained in the ultrasonic speed flow of the gas in the nozzle.

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